

Notice of Allowability

Application No.

10/645,273

Examiner

Aaron M. Richer

Applicant(s)

SANGER, KURT M.

Art Unit

2676

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Appeal Brief filed October 6, 2005.
2. ☒ The allowed claim(s) is/are 1-54.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

DETAILED ACTION

Allowable Subject Matter

1. Claims 1-54 are allowed.
2. As to claims 1, 19, and 37, Bresler (U.S. Patent 6,115,140) discloses inputting a halftone binary bitmap to a digital filter, filtering the binary pixels with the digital filter generating a weighted sum of the binary pixels producing a first set of multilevel pixels, and filtering the binary pixels with a second digital filter producing a second set of multilevel pixels (col. 3, lines 38-47). Bresler further discloses a comparison process to generate binary output (col. 3, lines 62-67; col. 4, lines 1-5). Lin discloses sampling a second set of multilevel pixels at a preset sample rate (col. 4, lines 57-67; col. 5, lines 1-5; col. 9, lines 40-55).

Bresler does not disclose inputting the set of sampled multilevel pixels to a lookup table to create an output that is a threshold level for the set of sampled multilevel pixels. It was noted in previous rejections that Lin disclosed lookup tables for image processing. However, the combination of Bresler and Lin still does not disclose this limitation in claim 1.

Bresler discloses a comparison process between two sets of multilevel data (col. 3, lines 62-67; col. 4, lines 1-5), but the threshold data Bresler uses to make a comparison is not generated by "inputting the set of sampled multilevel pixels to a lookup table," as Bresler does not work with a set of sampled multilevel pixels in the first place. Lin discloses a set of sampled multilevel pixels, but they are not input to a lookup table in order to create a threshold level output. If the teachings of Bresler and Lin were

Art Unit: 2676

combined, one skilled in the art would be able to construct an invention with sampled multilevel pixels that also used a threshold, but not one that used *sampled multilevel pixels to create an output that is a threshold level*. Because no other reference combinable with Bresler and Lin makes up for this deficiency, claim 1 is found to be allowable.

3. The following is an examiner's statement of reasons for allowance:

4. As to claim 1, the prior art does not anticipate the limitation of "inputting the set of sampled multilevel pixels to a lookup table to create an output that is a threshold level for the set of sampled multilevel pixels" along with the other limitations of claim 1.

Claims 19 and 37 recite similar limitations.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

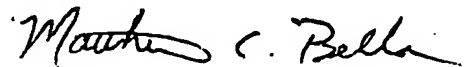
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron M. Richer whose telephone number is (571) 272-7790. The examiner can normally be reached on weekdays from 8:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Bella can be reached on (571) 272-7778. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2676

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AMR
12/16/05



MATTHEW C. BELLA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600